

**DISTRIBUTED UNIVERSAL COMMUNICATION MODULE FOR
FACILITATING DELIVERY OF NETWORK SERVICES TO ONE OR
MORE DEVICES COMMUNICATING OVER MULTIPLE
TRANSPORT FACILITIES**

ABSTRACT

InstA A scheme by which a computer may communicate with a variety of different systems (e.g., e-mail, voice mail, cellular telephone, pager, facsimile device, computer, motor, and home appliance) notwithstanding the communications protocol employed by different systems is described. In particular, the invention 5 features a universal communication module that establishes an open, transport-independent communications protocol that may be created and invoked to facilitate communications between any two devices interconnected over a global communication network that includes wireline (e.g., dial-up, dedicated line and local and wide area networks) and wireless (e.g., radio frequency and cellular) networks. 10 In one embodiment, a system for providing remote electronic services to a network node includes an origination agent, a communication module, and a service module. The origination agent resides at the origination network node. The origination agent is configured to transmit a request-for-service call incorporating one or more control parameters, including a destination node address. The communication module 15 encapsulates processes for communicating with the destination network node over multiple transport facilities. The service module resides on a server computer remote from the origination network node. The service module is configured to perform a prescribed function to produce a service deliverable in accordance with the request-for-service call and to access an instance of the communication module and pass the 20 one or more control parameters and the service deliverable to the communication module for delivery to the destination network node.